

36100

☐ INITIATOR OR OTHER

WORK PERFORMED BY (check one)

☐ MAINTENANCE
☒ ON-SITE CONTRACTOR
☐ OTHER CONTRACTOR
☐ N/A

IN ROOM LOBBY IN BUILDING 130
CONFERENCE ROOM

36973

10/28/94

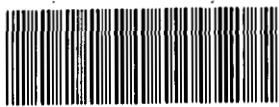
6.1.4/4-1(1) 03/07/94

ADMIN RECCRD

1A-A-000743

Printed with soy ink on recycled paper

By Jane E. [Signature] (U/NW)
Date 10/27/94



000064273

PROJECT COVER/INDEX SHEET

PROJECT NUMBER: 989884

TITLE: BUILDING 964 REMOVAL

DATE: 10/26/94

TEAM MEMBERS: L EHRLICH of ARCH M AUSTIN of PROJ of _____ of _____ of _____ of _____ of _____ of _____

B = Technical Baseline
(To be as-built)

R = Reference
(Not to be as-built)

I = For Implementation
of work or distribution

S = Supporting (Not
for distribution)

Date = Date of Issue

Document Description, Number, Reference Location	B or R		I or S		Date
PROGRAM ASSIGNMENT SCREEN		R		I	
SYSTEM CLASSIFICATION FORM		R		I	
ENGINEERING WORK PLAN DESIGN INPUT		R		I	
TECHNICAL SCOPE & CONSTRUCTION SPECIFICATIONS		R		I	
COMMENT RESOLUTION SHEET		R		I	
AREA PLOT PLAN 30000-001 REV AC		B		I	
BUILDING 964 REMOVAL BUILDING FLOOR PLAN & ELEVATIONS 37805-13-01A REV A INTERIUM ISSUE		R		I	

DISTRIBUTION: (Complete when an EO is not used.)	NAME			NAME		

Attach continuation page(s) if needed

PROGRAM ASSIGNMENT SCREEN

JOB#: 989884

BUILDING 964

BLDG: 964

TITLE: REMOVAL

DESCRIPTION: _____

SECTION A - NUCLEAR WORK PROCESS REQUIRED

Y N

- | | | | |
|-----|---|-----------------------|----------------------------------|
| 1. | Does work affect/modify Vital Safety Systems | <input type="radio"/> | <input checked="" type="radio"/> |
| a.. | Modify VSS hardware, software or require a change in VSS? | <input type="radio"/> | <input checked="" type="radio"/> |
| b. | Impact a vital safety function during installation, modification, or repair? | <input type="radio"/> | <input checked="" type="radio"/> |
| c. | Will this work create a "Violation" with respect to any Criticality Safety Operating Limit (CSOL) or Nuclear Material Safety Limit (NMSL), or is a new CSOL or NMSL required? | <input type="radio"/> | <input checked="" type="radio"/> |
| d. | Will this work require any modification, addition or deletion of an existing VSS procedure? | <input type="radio"/> | <input checked="" type="radio"/> |
| e. | Will this work impact any system for which credit is taken in an Operational Safety Requirement (OSR)? | <input type="radio"/> | <input checked="" type="radio"/> |
| f. | Will this work create an "Out-of-Tolerance" with respect to and OSR Limiting Condition of Operation (LCO)? | <input type="radio"/> | <input checked="" type="radio"/> |
| 2. | Does work involve Hazardous Chemicals of sufficient quantity and/or type to pose potential for catastrophic events?
(If applicable, refer to COEM, Section 6.3.6, Appendix 6). | <input type="radio"/> | <input checked="" type="radio"/> |

SECTION B - SAFEGUARDS AND SECURITY SYSTEMS

- | | | | |
|----|---|-----------------------|----------------------------------|
| 1. | Does work affect Safeguards and Security Systems? | <input type="radio"/> | <input checked="" type="radio"/> |
|----|---|-----------------------|----------------------------------|

SECTION C - ENGINEERING SUPPORT PROGRAM (ESP) ELIGIBILITY

If the answer to any of the above questions is "yes," use other Sections of the COEM. If all answers are "no," use GES program. Tasks "failing" the screen may still use GES program. Submit Appendix 2 to management for approval.

- | | | | | |
|----|--|----------------------------|---------------------------------------|-----------------------------|
| 1. | Work is assigned to COEM procedure (circle one): | <input type="radio"/> 6.01 | <input checked="" type="radio"/> 6.02 | <input type="radio"/> Other |
|----|--|----------------------------|---------------------------------------|-----------------------------|

LINDA EHRLICH

Preparing Engineer (Print/Sign)

10/27/94
Date

SYSTEM CLASSIFICATION FORM

WORK CONTROL NO. 989884 TITLE: BUILDING 964 REMOVAL

System Name: NONE

Bldg.: 964 Location: EAST OF POND 207B CENTRAL

6.1.1 SYSTEM REFERENCE DOCUMENTS:
NONE

6.1.2 SYSTEM FUNCTIONS AND OPERATING MODES
NOT APPLICABLE

6.2 SYSTEM CLASSIFICATION (Identify references from those documents listed in Section 6.1.1 and enter technical justification on appropriate space below)

Category ☐ 1 ☐ 2 ☐ 3 ☒ 4

Basis:

THE BUILDING DOES NOT MEET THE REQUIREMENTS OF SYSTEMS CATEGORY 1 OR 2. IT IS NOT RELIED UPON FOR WORKER PROTECTION FROM RADIOLOGICAL OR TOXIC HAZARDS. IT IS NOT REQUIRED FOR PROTECTION OF SNM, CLASSIFIED MATERIAL OR SITE RESPONSE EMERGENCY. THE BUILDING DOES NOT HAVE A FIRE SPRINKLER SYSTEM. THIS BUILDING IS A SYSTEM CATEGORY 4.

LINDA EHRLICH
Cognizant Engineer

Linda Ehrlich X7949
Print Name Cognizant Engineer Signature Ext./DP

10/27/94
Date

ENGINEERING WORK PLAN

FOR

BUILDING 964 REMOVAL

OCTOBER 1994

Mark Austin
Project Engineer

DESIGN INPUT

5

CONCURRENCE SHEET

TE Kramer
T. Kramer, Work Package Manager / Project Manager

10-11-94
Date

M. R. Austin
M. R. Austin, Project Engineer

10/11/94
Date

J. Fauble, ER Design Engineering

Date

Revision Record

Rev #	Purpose	Date	Approval(s)
0	Original Issue	10-10-94	

1.0 Project Identification

The purpose of this project is to remove Building 964 to allow for the IM/IRA Phase I closure of the Solar Evaporation Ponds. The building is located east of 207B Center pond and consists of a wood frame structure covered with galvanized steel siding and a rolled asphalt roof. The building is used as a RCRA storage facility and does not have a history of contamination concerns.

2.0 Project Budget and Cost Plan

The project cost, based from the rough order of magnitude cost estimate from Tom Danielson in *AUGUST 1994*, is \$2,000,000. At the time, only limited information about the facility was available, and the scope estimate from Building 788 was used to develop the ROM number. Engineering & Project Management has prepared a scope level document and has proposed 80 hours to complete a General Engineering Services Title II package to remove the facility.

4.0 Project Justification

This project is required to allow for the optimization of the OU-4 Phase I IM/IRA.

5.0 Assumptions and Basis of Estimate

The engineering BOE's for Title II Design were provided by the engineering disciplines required for the project. The design hour commitments are listed below for Title II Activities:

Project Engineer	10	hours
Architectural Engineering	80	hours

Assumptions made consist of the following:

1. Relocation of the wastes (approximately 2092 drums) were not included in the scope.
2. The building was assumed to be "clean" from a radiological perspective and could be removed without special contamination concerns. Dick Norton of Rad Engineering stated that no rad concerns presently exist on the facility.
3. The building would be removed and disposed of as scrap material or wastes the landfill can take.
4. Rad./Haz. Monitoring will be required before anything can be released from the PA.

6.0 Relationship to Other Projects

This project is related to the OU-4 Phase I IM/IRA closure action. This building is to be removed prior to initiating the Phase I work.

7.0 Key Personnel and Responsibilities

Project Manager (PM) : T. Kramer

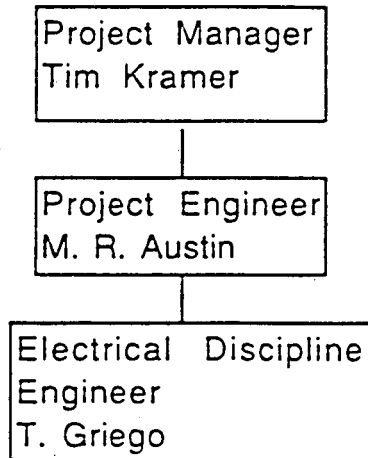
The PM is responsible for all DOE and 4700.1 reporting requirements for the project, work package development and maintenance, and provides the authorization to the Project Engineer to perform the design work for the project. The PM reports to the Program Manager for OU-4.

Project Engineer (PE): M. R. Austin

The PE is responsible for the technical baseline of the project and ensuring the design meets the needs of the PM. The PE is also responsible for coordination of the support disciplines, ensuring schedule and cost commitments for engineering activities are met, compilation of all support discipline deliverables to combine it into one completed Title design package, providing plantwide review of design packages, ensuring compliance with DOE 6430.1A, COEM and RFP Standards. The PE reports directly to the PM.

Architectural Engineer: L. Ehrlich

The architectural discipline engineer is responsible for providing a General Engineering Services (GES) design package which meets the needs identified in the scope document. The design should be in accordance with good engineering practices and meet all applicable requirements. The discipline engineer provides, as a deliverable to the PE, their completed drawings and specifications which meet the applicable design requirements. The discipline engineer is responsible for resolution of comments received from reviewers of the design package and receiving approvals required by their design managers.



Organizational Breakdown Structure

9.0 Schedule Requirements

(See Next Page)

Name	Earliest Start	Earliest Finish	Duration	% Done
964 Scope Approval	10/11/94	10/11/94	1	0
Issue ESR & Approval of	10/12/94	10/12/94	1	0
Issue DSR to Architectural	10/13/94	10/13/94	1	0
Photo Shoot of Building	10/14/94	10/27/94	10	0
GES Design of 964	10/26/94	11/1/94	5	0
Prepare 964 for GES	11/2/94	11/2/94	1	0
Printing / Distribution of	11/3/94	11/7/94	3	0
964 Package Review	11/8/94	11/18/94	9	0
964 Review Meeting	11/21/94	11/21/94	1	0
964 Comment / Response	11/22/94	11/24/94	3	0
964 Final Package	11/25/94	11/25/94	1	0
Schedule Reserve	11/28/94	12/1/94	4	0
964 GES Package Approval	12/2/94	12/2/94	1	0
Print / Distribute Final	12/5/94	12/7/94	3	0

10/11/94

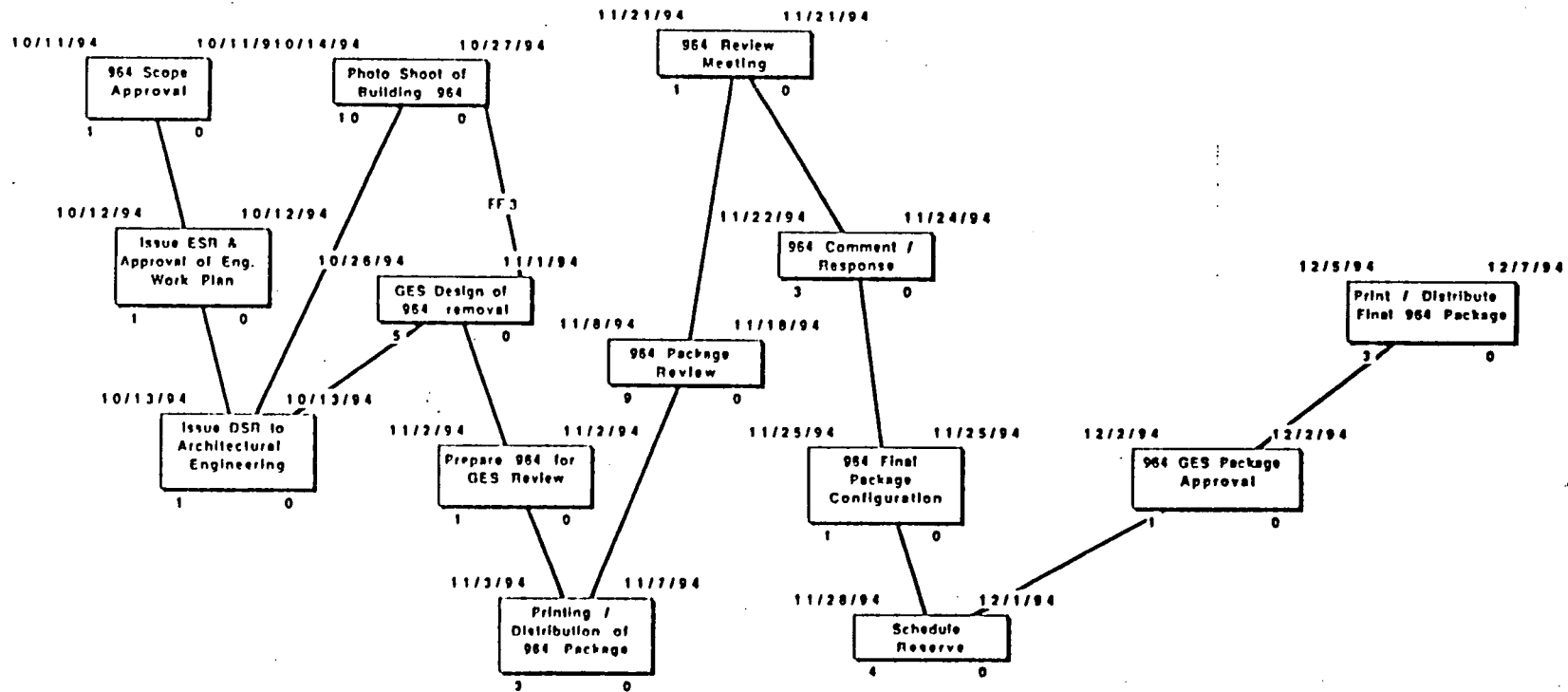
Building 964 Removal - EWP Schedule

10

10/11/94

Building 964 Removal - EWP Schedule

9/5/94	9/19/94	10/3/94	10/17/94	10/31/94	11/14/94	11/28/94	12/12/94	12/26/94
		964 Scope Approval <input type="checkbox"/>						
		Issue ESR & Approval of Eng. Work Plan <input type="checkbox"/>						
		Issue DSR to Architectural Engineering <input type="checkbox"/>						
		Photo Shoot of Building 964 <input type="checkbox"/>						
		QES Design of 964 removal <input type="checkbox"/>						
		Prepare 964 for QES Review <input type="checkbox"/>						
		Printing / Distribution of 964 Package <input type="checkbox"/>						
			964 Package Review <input type="checkbox"/>					
			964 Review Meeting <input type="checkbox"/>					
			964 Comment / Response <input type="checkbox"/>					
			964 Final Package Configuration <input type="checkbox"/>					
			Schedule Reserve <input type="checkbox"/>					
			964 QES Package Approval <input type="checkbox"/>					
			Print / Distribute Final 964 Package <input type="checkbox"/>					



10/11/04

Building 964 Removal - EWP Schedule

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**TECHNICAL SCOPE
&
CONSTRUCTION SPECIFICATIONS
for
BUILDING 964 REMOVAL**

Prepared by:

**EG&G ROCKY FLATS, INC.
Engineering and Technology
Rocky Flats Plant
Golden, Colorado**

Project No. 989884

October 27, 1994

SECTION 01006-DRAWING LIST

This is a list of the drawings:

<u>DRAWING No.</u>	<u>REV. No.</u>	<u>TITLE</u>
30000-001	AC	AREA PLOT PLAN
37805-13-01A	A	BUILDING 964 REMOVAL

DEMOLITION

GENERAL

1. This project is part of the OU-4 Phase I IM/RA closure action. This demolition work shall be completed before initiation of the Phase I work. This project is another area that shall be incorporated into the Environmental Cap.
2. All items either removed from the building or rubble from the demolition of the building shall be monitored and cleared by Radiological Engineering before removal from the protected area. Then disposition items for reuse or recycling as is appropriate.
3. All rubble from the building shall be sorted as follows:
 - a. Free release: These items detected by radiological engineering to be free of contamination shall be disposed of in the onsite landfill.
 - b. Decontamination to Free release: Items contaminated which can be decontaminated and then disposed of in the onsite landfill.
 - c. Contaminated: These items detected by radiological engineering to be contaminated shall be sorted, stacked and stored for later incorporation under the OU-4 environmental cap.
4. Rubble shall be defined as materials generated by the demolition of the buildings. Rubble shall be but is not limited to wood, siding, nail, metal brackets, vents, doors and roofing materials.
5. All work shall be done in accordance with Rocky Flats HSP Manuals.

ARCHITECTURAL

1. Before demolition of building 964 all waste storage drums, wood pallets and miscellaneous items shall be removed from the interior of the building by others.
2. Demolish building 964 down to the concrete floor slab. This includes but is not limited to removing siding, corrugated fiber glass panels, roofing, girts, purlins and timber support structure.
3. Cut all protruding anchor bolts flush with the top of the concrete floor slab.
4. The subcontractor shall prepare and submit a sequence of work, crating plan and hoisting/rigging plan for engineering approval.
5. Location of a temporary laydown and sorting area shall be decided by Construction Management.
6. See Selective Demolition Specification for general requirements.

PIPING/MECHANICAL

1. No work required.

ELECTRICAL

1. No work required.

FIRE PROTECTION

1. No work required.

SECTION 02070-SELECTIVE DEMOLITION

PART I GENERAL

1.1 WORK INCLUDED

- A. Provide all labor, materials, tools and equipment and perform all work and services necessary for or incidental to the execution of all demolition complete with accessories as shown on the contract drawings and as specified herein in accordance with the provisions of the Contract Documents and completely coordinated with the work of all other trades. Although such work is not specifically shown or specified, all supplementary or miscellaneous items, appurtenances and devices incidental to or necessary for a sound secure and complete erection of demolition shall be furnished and installed as part of this work.
- B. Work includes the removal of items indicated on the contract demolition drawings.
- C. Submittal-Five days prior to start of the work, submit a demolition schedule for the approval of the Buyer that outlines proposed demolition start dates and durations. Demolition of existing facilities shall be in accordance with the approved demolition schedule. Changes to the approved schedule shall be subject to approval of the Buyer.
- D. All work shall be performed in accordance with NFPA 241, Standard for Construction, Alteration and Demolition Operations.
- E. Any cutting or welding operations shall require a "Hot Work Permit" from the Fire Prevention Bureau (T371F).
- F. The sprinkler system shall remain in service at all times during demolition. Exceptions should be approved by Fire Protection and the proper impairment process followed. Obstructions to the sprinkler system shall be limited and approved by Fire Protection.
- G. All work shall be performed in accordance with HSP 12.11.

PART II PRODUCTS

- 2.1 EQUIPMENT: Equipment used in any demolition work must be equipped with safety devices that will adequately protect the operator.

PART III EXECUTION

- 3.1 PROTECTION OF EXISTING WORK: Before beginning any cutting or demolition work, carefully survey the existing work and examine the drawings and specifications to determine the extent of the work. Take all necessary precautions to ensure against damage to existing work to remain in space, to be reused or to remain the property of the Contractor, and any damage to such work shall be repaired or replaced as approved by Contractor at no additional cost to the Contractor. Carefully coordinate the work of this section with all other work.

- 3.2 **DUST CONTROL:** The amount of dust resulting from demolition work shall be controlled with the construction of temporary barriers and partitions to prevent the spread of dust to occupied portions of the building and to avoid creation of nuisance in the surrounding areas. Use of water for dust control will not be permitted by the Contractor.
- 3.3 **BURNING:** The use of burning at the project site for the disposal of refuse and debris will not be permitted.
- 3.4 **SALVAGE:** Removed materials designated for salvage shall be stored in areas on the Rocky Flats plantsite designated by the Contractor. All such material shall remain the property of the Contractor.
- 3.5 **DISPOSAL:** All materials not designated for reuse or salvage shall be removed from the jobsite. Disposal of these materials shall be made at a dump site on the Rocky Flats plantsite designated by the Contractor.

END OF SECTION

DOCUMENT COMMENTS / RESOLUTIONS (C/R FORM)

Document Type:

PROJECT TITLE BUILDING 964 REMOVAL

WCR / EJO # 989884 BUILDING # 964

REVIEWER'S NAME (print) _____

ORGANIZATION _____ PHONE # _____

[illegible]

***MANDATORY COMMENTS MUST REFERENCE BASELINE DOCUMENT SECTION AND PARAGRAPH.**

FULL CONCURRENCE: I have reviewed the document referenced above from my organization's discipline-specific point of view, concur fully with its implementation, and hereby grant my organization's approval.

All comments and concerns I may have had about this document have been resolved to my satisfaction.

Reviewer's Signature _____ Date _____

FINAL COMMENT DISPOSITION BY DEM: I have made final disposition for all comments not resolved to the satisfaction of the reviewer. Technical justification for the disposition of these comments is attached.

Design Engineering Manager (print) _____

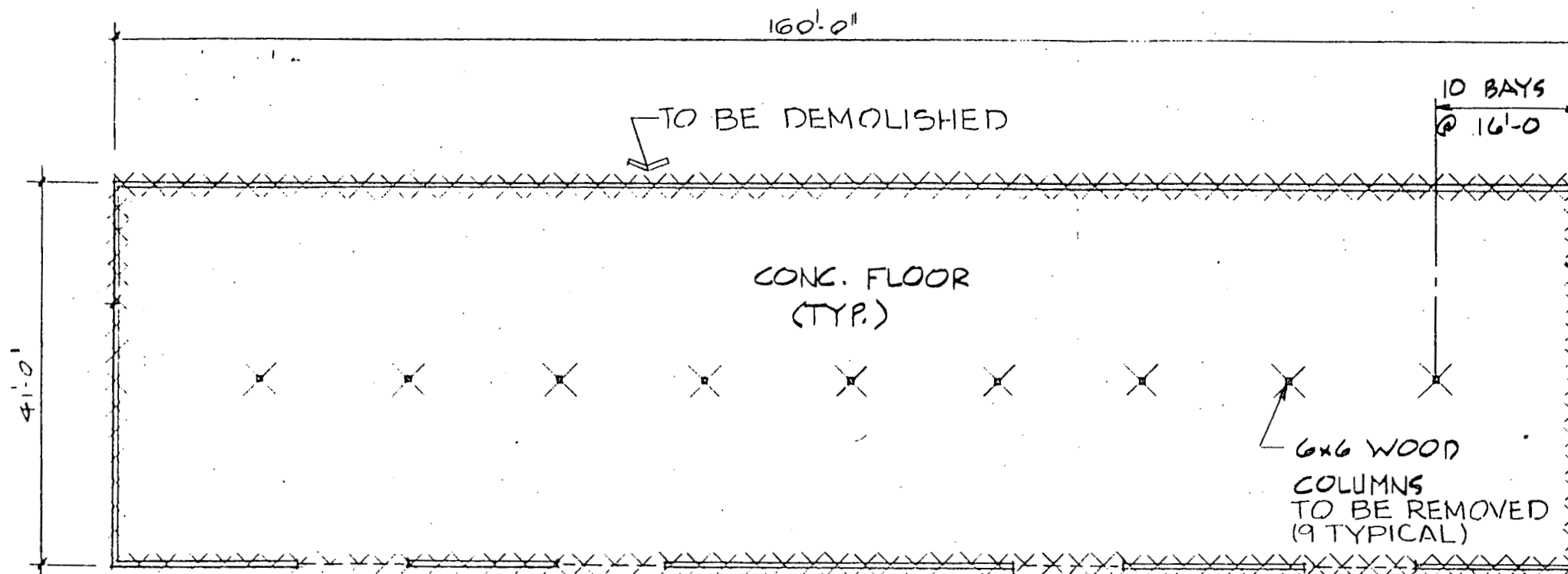
DEM's Signature _____ Date _____

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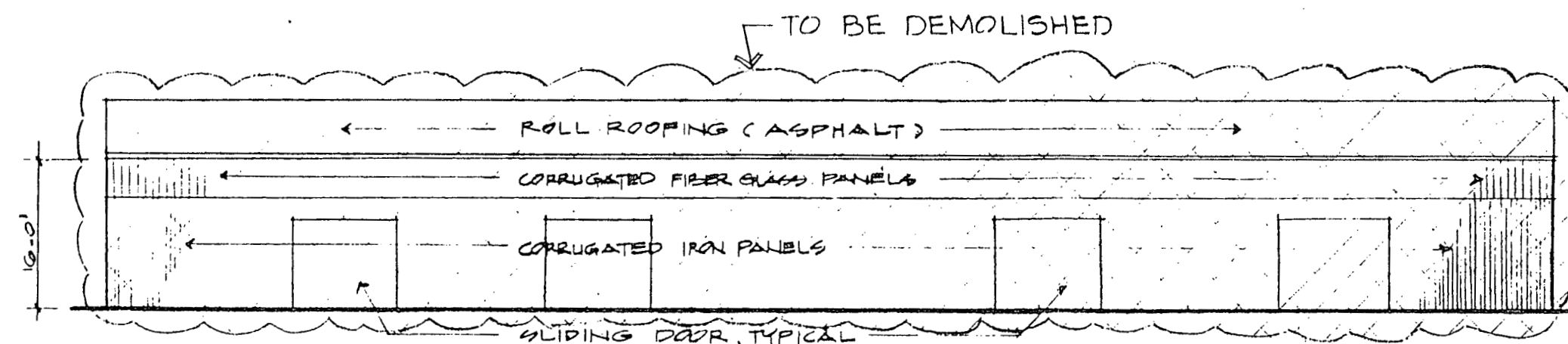
Page ____ of ____

REVIEWER'S NAME (print) _____

[illegible]



FLOOR PLAN - BLDG 964
SCALE: 1/16" = 1'-0"

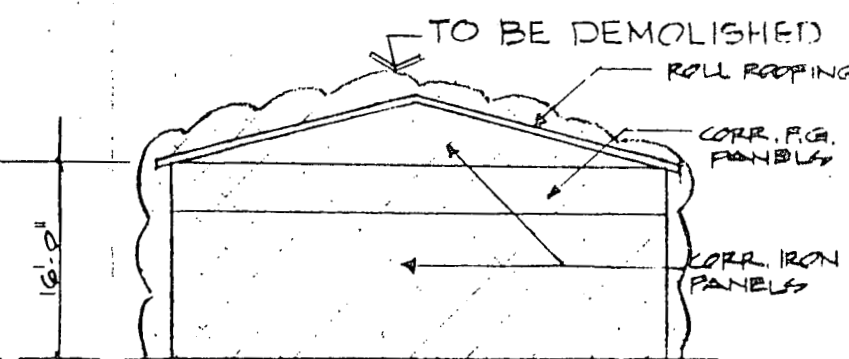


SOUTH ELEVATION
SCALE: 1/16" = 1'-0"

NOTES

1. Demolish building 964 down to the concrete floor.
2. Cut all protruding anchor bolts flush with the top of the concrete floor.
3. The subcontractor shall prepare and submit a sequence of work, crating plan and hoisting/ rigging plan for engineering approval.
4. All items removed from or generated from the demolition work shall be monitored and cleared by Radiological Engineering before removal from the protected area. Then disposition items for reuse or recycling as is appropriate.
5. Work this drawing with demolition description of work. See Section 02070-Selective Demolition Specification for general requirements.

FOR REVIEW
Jim Paul
10-27-94



SIDE ELEVATION
SCALE: 1/16" = 1'-0"

INTERIM DRAWING - CONSTRUCTION ONLY
AS-BUILT MASTER DRAWING WHEN
CONSTRUCTION IS COMPLETE
RESPONSIBLE GROUP

ISSUE	DESCRIPTION	DATE	CLASS	JOB NO.
1A	INTERIM ISSUE			
DESIGNED - EHRlich	BLDG. 964			
DRAWN EHRlich	REMOVAL			
CHECKED	BUILDING FLOOR PLAN			
APPROVED	& ELEVATIONS			
RELEASE DATE				

Rocky Flats Plant		989884
GOLDEN, COLORADO		989621
SIZE	ISSUE	SHEET
B	37805-13-01A	A
		OF
		L